CONTENTS

Editorial - The trumpet shall sound	1
Awram - Effects of crowding on wing morphogenesis in Myzus persicae	
Sulz.(Aphididae; Hemiptera)	3
Craig - The clarification of a discrepancy in descriptions of maxillary	
musculature in larval Simuliidae	31
Editorial - Man and whose world?	33
McDonald - The life history of Cosmopepla bimaculata (Thomas)	
(Heteroptera : Pentatomidae) in Alberta	35
Klassen - Dispersal of mosquitoes	39
Sehgal - Descriptions of new species of flies of the family Agromyzidae	
from Alberta, Canada (Diptera)	57
Book review	89
Tawfik - Feeding mechanisms and the forces involved in some	
blood-sucking insects	92
Abdelnur - The biology of some black flies (Diptera: Simuliidae)	
of Alberta	113
Editorial - On the life and death of information	175
Krishnan - Lipid metabolism in Blattella germanica L.: composition during	
embryonic and post embryonic development	177
Matthews - A paleoenvironmental analysis of three late Pleistocene	
coleopterous assemblages from Fairbanks, Alaska	202
Tawfik - Effects of the size and frequency of blood meals on Cimex lectularius I.	225



INDEX

Abdelnur, O.M., 113	Anopheles albimanus, 48
Acheta mitrara, 179	aldrichi , 49
Acridium peregrinum, 178	atroparvus, 48
Acylophorus, 210	cantator, 49
Adams, P.C.G., 48, 51	culcifacies, 40
Aedes, 39	flavirostris, 48
aegypti, 40, 50, 92	freeborn i , 40
head, 95	funestus, 48
mouthparts, 94	gambiae, 42, 48
albopictus, 49	labranchiae , 48
aldrichi , 44	maculipennis , 39, 48
albimanus, 92	melas, 45
cantator, 50	minimus, 48
cataphylla, 42	pharoensis 39,48
communus, 49	quadrimaculatus, 40, 92
dorsalis, 49	saccharovi , 39
fitchii , 40	sollicitans, 48
flavescens, 50	sundaicus 39, 48
leuco celaenus, 49	vagus, 48
nigromaculis, 50	Ansell, G.B., 196, 197
punctor, 42	Aphididae, 3
spencerii, 50	aphids, alate, 3
sollicitans, 39	apterous, 3
tarsalis, 42	Aphodius, 211, 219
taeniorhynchus, 39, 49	aquatic organisms, 117
Aeshna, 117	Arnason, A.P., 113, 166
Agonum quinquepunctatum, 210, 219	Arthropoda, 117
Agrion, 117	Athabasca River, 118
Agromyza albertensis (n.sp.), 57, 77	Athripsodes, 118
ambigua , 58	Awram, W.J., 3, 8, 29
barberi, 59	Babcock, K.L., 177, 198
isolata, 60	Bacot, A.W., 225, 256
masculina (n.sp.), 57, 59, 78	Bailey, S.F., 40, 51
niveipennis, 58	Ball, G.E., 75, 208, 223
spiraeae, 60	Barlow, C.A., 249, 256
Agromyzidae (from Alberta), 57	Barlow, J.S., 180, 198
Alaska, 202	Barnley, G.R., 159, 166
biota, 204	Barreda, E.A., 159, 166
paleoenvironment, 202	Barreda, E.A., 159, 166
physical environment, 204	Basrur, V.R., 113, 166
Albrecht, G., 193, 197	Bartlett, G.R., 182, 198
Allais, J.P., 178, 197	Beckel, W.E., 227, 256
Amara alpina, 203, 210	bed bugs, 92
Anderson, G.B., 3, 29	beetles (ground), 89
Anderson, J.R., 117, 166	behavior (mosquito), 40
Annelida, 117	Bell, W., 225, 256
,	